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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,685	02/25/2002	Martin P. Redmon	0701100e	4621

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EXAMINER	
MITCHELL, GREGORY W	

ART UNIT	PAPER NUMBER
1617	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/082,685	REDMON ET AL.	
	Examiner	Art Unit	
	Gregory W. Mitchell	1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *41-60* is/are pending in the application.

4a) Of the above claim(s) *46-48,52-54 and 58-60* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *41-45,49-51 and 55-57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/15/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the Remarks and RCE filed March 15, 2005. Claims 41-60 are pending. Claims 46-48, 52-54 and 58-60 are withdrawn from consideration as being drawn to a non-elected invention. Claims 41-45, 49-51 and 55-57 are examined herein.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 15, 2005 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 50-51 and 56-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 50-51 and 56-57 recite the limitation "the lactose-free core". There is insufficient antecedent basis in the corresponding independent claims (49 and 55) for this limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 41, 43-45 and 55-57 are rejected under 35 U.S. C. 103(a) as being unpatentable over Aberg et al. (USPN 5595997) in view of each of Blaug et al. (*Journal of Pharmaceutical Sciences*, 61(11), 1770-5), Ritschel et al. (1970CA:136347), Hartauer et al. (*Drug Development & Indust. Pharm.*, 17(4), 617-30), and Schwartz et al. (WO 96/05216, relying on USPN 6080735 as an English language equivalent).

Aberg et al. teaches pharmaceutical compositions comprising descarboethoxyloratadine (DCL) or a pharmaceutically acceptable salt thereof in a therapeutically effective amount (Abstract; col. 4, lines 62-64; col. 9, lines 6-11). The compositions are disclosed to be effective at treating allergic rhinitis, etc. in humans (col. 3, lines 21-30). Granulating agents, carriers, diluents, binders, etc. are disclosed as useful in oral solid preparations of the invention (col. 9, lines 31-39). The dosage range is taught to be 0.1-10 mg/day (col. 7, lines 47-58). Therapeutically effective amounts of additional agents, such as decongestants, are taught (col. 8, lines 52-65).

Coatings are taught (col. 9, lines 40-44). Aberg et al. discloses a pharmaceutical dosage that is lactose free (see Example 8). Aberg et al. does not specifically disclose that the composition should be lactose free, nor does Aberg et al. specifically disclose that the coating agent should be inert.

Blaug et al. teaches that amines are known in the art to interact with lactose to produce browning (p. 1770).

Ritschel et al. teaches the incompatibility of amines and lactose. No dependence on the discoloration of the compositions was found based on the type of amine (primary, secondary, tertiary, quaternary).

Hartauer et al. teaches that it is recommended that DSC be employed for routine screening of excipients for compatibility (p. 618). Hartauer et al. further discloses that brown discoloration occurs between aminophylline (an amine) and lactose (p. 617).

Schwartz et al. teaches that polyvinylpyrrolidone (an inert film forming agent) is a common coating agent for tablets (col. 7, line 58-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare the claimed DCL composition as lactose free because (1) nothing in the teachings of Aberg et al. requires that the composition contain lactose; (2) Aberg et al. discloses a composition formulated for oral administration which *does not* contain lactose; (3) Blaug et al., Ritschel et al. and Hartauer et al. teach that it is known in the art that amines interact adversely with lactose; and (4) Hartauer et al. teaches that it is not only known in the art, but *recommended* that possible interactions between active medicinal agents and excipients be screened for compatibility. One would have been

motivated to prepare a composition that was lactose free because of an expectation of success in preparing a composition suitable for administration, as taught by Aberg et al. (since there is no requirement disclosed anywhere therein that lactose be present) and in order to avoid the incompatibility effects known to exist between amines and lactose, as taught by each of Blaug et al., Ritschel et al. and Hartauer et al.

It would have been obvious to one of ordinary skill in the art to coat the composition of Aberg et al. with an inert film forming agent such as polyvinylpyrrolidone because (1) Aberg et al. teaches the use of coating agents in general; and (2) Schwartz et al. teaches that polyvinylpyrrolidone is a common coating agent known in the art. Accordingly, polyvinylpyrrolidone is species within the genus taught by Aberg et al. and is known in the art to be interchangeable therewith. One would have been motivated to substitute the general teaching of Aberg et al. of a coating with polyvinylpyrrolidone, specifically, because of an expectation of success in preparing a coated tablet suitable for treating the various disorders, such as allergic rhinitis, etc., disclosed by Aberg et al.

It is noted that the hygroscopicity of a composition is a property thereof. Accordingly, since the composition taught by the combined references is the same as that claimed, it is Examiner's position that, absent evidence to the contrary, the composition taught by the combined references will possess the same property as instantly claimed. A product and its properties are inseparable. *In re Papesch*, 315 F.2d 381, 137 USPQ 43 (CCPA 1963).

Claims 42 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aberg et al., Blaug et al., Hartauer et al., Ritschel et al. and Schwartz et al. as applied to claims 41, 43-45 and 55-57 above, and further in view of Villani et al. (USPN 4659716).

Aberg et al., Blaug et al., Hartauer et al., Ritschel et al. and Schwartz et al. apply as disclosed above. The combined references lack a specific teaching of waxes or an anhydrous core.

Villani et al. teaches pharmaceutical compositions comprising the active as herein envisioned (col. 1, lines 18-46; col. 6, line 62-col. 7, line 23). Waxes are specifically taught as suitable solid carriers in the pharmaceutical compositions disclosed therein (col. 6, line 62-col. 7, line 23). The actives are taught to be either solvated or unsolvated (e.g. hydrated) (col. 1, lines 65-69).

It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare a composition as herein claimed comprising a wax because (1) both Aberg et al. and Villani et al. are directed to compositions comprising DCL; (2) both Aberg et al. and Villani et al. teach the use of carriers in the pharmaceutical compositions disclosed therein; and (3) Villani et al. teaches that waxes are a suitable carrier for the pharmaceutical compositions disclosed therein. Accordingly, one would have been motivated to utilize waxes as the carrier of the combined references because of an expectation of success in preparing a pharmaceutical composition suitable for the treatment of allergic rhinitis, as taught by Aberg et al., because Villani et al. teaches that

the generic teaching of carriers is interchangeable with the waxes specifically disclosed therein as suitable carriers for the same active.

It would have been obvious to one of ordinary skill in the art to prepare an anhydrous composition because (1) Aberg et al. and Villani are both directed to compositions comprising DCL; and (2) Villani et al. teaches that the actives disclosed therein may be in either solvated or unsolvated form. Accordingly, it would have been obvious to one of ordinary skill in the art to prepare actives with varying salvation states, including anhydrous actives, because Villani et al. teaches them as interchangeable. One would have been motivated to prepare an anhydrous composition because of an expectation of similar success in preparing a pharmaceutical composition taught by Aberg et al. to be suitable for the treatment of allergic rhinitis.

Response to Arguments

Applicant argues, "from the disclosure of Blaug et al., one of skill in the art would not expect a secondary amine, such as DCL, to be reactive with lactose." This argument is not persuasive because, as Applicant admits, "Blaug et al., in the introductory paragraphs provides a recitation of early thoughts with respect to the incompatibility of amines (with disregard as to species) and lactose." The later finding of Duvall et al. that browning was predominantly a primary amine-carbonyl type reaction is not sufficient to overcome the instant rejection because "predominantly" does not mean nor does it infer "exclusively". Accordingly, the skilled artisan would have understood other "species" of amines as being susceptible to amine-carbonyl type

reactions, even if not to the degree primary amines were susceptible thereto. Furthermore, Ritschel et al. teaches that discoloration is known to occur for all types of amines.

Applicant's arguments regarding Hartauer et al. are not persuasive. Applicant focuses on the fact that the examples disclosed in Hartauer et al. are only primary amines. This argument is not persuasive because Hartauer et al. is used to (1) generally show that amines are known to be incompatible with lactose; and more importantly (2) that it is known in the art to routinely screen actives and excipients for compatibility. Applicant's assertion that "Hartauer et al. teaches that primary amines are reactive with lactose while secondary amines are not reactive with lactose" is not persuasive. It is noted that theophylline is *not* a secondary amine. The only nitrogen atom that could even possibly be construed as a secondary amine is the nitrogen at the one position of an aromatic 1,3-diazole. Such a nitrogen will *not* have the reactivity of a secondary amine.

Applicant's assertion that because "DCL was routinely formulated with lactose" it would have been unobvious to exclude lactose as a component in a pharmaceutical composition comprising DCL is not persuasive. Simply because it would have been obvious to one of ordinary skill in the art to prepare a DCL composition comprising lactose for compatibility purposes would not preclude them from doing so for other reasons, e.g. economic reasons.

Applicants claim that "Applicant's discovery of the incompatibility of lactose and DCL was therefore unexpected and surprising" is not persuasive because (1) Blaug et

al., Ritschel et al. and Hartauer et al. teach that amines are known to be incompatible with lactose; and (2) Hartauer et al. teaches that it is within the routine skill of the art to test the compatibility of an active with an excipient.

The new grounds of rejection render the remainder of Applicant's arguments moot.

Applicant's arguments regarding the non-patent literature on the Information Disclosure Statement filed March 15, 2005 are not pertinent to the instant rejections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory W Mitchell whose telephone number is 571-272-2907. The examiner can normally be reached on M-F, 8:30 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

gwm

SREENI PADMANABHAN
SUPERVISORY PATENT EXAMINER